

ABSTRACT OF THE DISCLOSURE

A mask layer having four mask films used in the fabrication of an interconnect structure of a semiconductor device. The first mask film and the third mask film have substantially equal etch rates. The second mask film and the fourth have substantially equal etch rates film, and different from that of the 5 etch rate of the first and third mask films. A via is etched to the first mask film. Then a trench is etched to the third mask film of the mask layer. The via and trench are then etched in a dielectric material. The second, third and fourth mask films are removed and the first mask film remains a passivation layer for the dielectric material. A conductive metal is deposited in the via and trench.

100 99 98 97 96 95 94 93 92 91 90 89 88 87 86 85 84 83 82 81 80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1